

**Combined Declaration and Power of Attorney for Patent Application**

Docket Number: 1744.0450003

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter that is claimed and for which a patent is sought on the invention entitled, Method, System, and Apparatus for Balanced Frequency Up-Conversion of a Baseband Signal, the specification of which is attached hereto unless the following box is checked:

- was filed on March 14, 2000; as United States Application Number or PCT International Application Number 09/525,615; and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)	Priority Claimed		
(Application No.)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
(Application No.)	(Country)	(Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

<u>60/177,381</u> (Application No.)	<u>January 24, 2000</u> (Filing Date)
<u>60/171,502</u> (Application No.)	<u>December 22, 1999</u> (Filing Date)
<u>60/177,705</u> (Application No.)	<u>January 24, 2000</u> (Filing Date)
<u>60/129,839</u> (Application No.)	<u>April 16, 1999</u> (Filing Date)
<u>60/158,047</u> (Application No.)	<u>October 7, 1999</u> (Filing Date)
<u>60/171,349</u> (Application No.)	<u>December 21, 1999</u> (Filing Date)
<u>60/177,702</u> (Application No.)	<u>January 24, 2000</u> (Filing Date)

60/180,667  
(Application No.)

February 7, 2000  
(Filing Date)

60/171,496  
(Application No.)

December 22, 1999  
(Filing Date)

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

(Application No.)

(Filing Date)

(Status - patented, pending, abandoned)

(Application No.)

(Filing Date)

(Status - patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Robert G. Sterne, Esq., Reg. No. 28,912; Edward J. Kessler, Esq., Reg. No. 25,688; Jorge A. Goldstein, Esq., Reg. No. 29,021; Samuel L. Fox, Esq., Reg. No. 30,353; David K.S. Cornwell, Esq., Reg. No. 31,944; Robert W. Esmond, Esq., Reg. No. 32,893; Tracy-Gene G. Durkin, Esq., Reg. No. 32,831; Michele A. Cimbala, Esq., Reg. No. 33,851; Michael B. Ray, Esq., Reg. No. 33,997; Robert E. Sokohl, Esq., Reg. No. 36,013; Eric K. Steffe, Esq., Reg. No. 36,688; Michael Q. Lee, Esq., Reg. No. 35,239; Steven R. Ludwig, Esq., Reg. No. 36,203; Raz E. Fleshner, Esq., Reg. No. 34,331; John M. Covert, Esq., Reg. No. 38,759; and Linda E. Alcorn, Esq., Reg. No. 39,588.

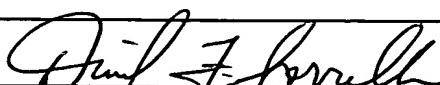
Send Correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 New York Avenue, N.W.  
Suite 600  
Washington, D.C. 20005-3934

Direct Telephone Calls to:

(202) 371-2600

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor <b>David F. SORRELLS</b>	Date <i>06/01/08</i>
Signature of sole or first inventor 	
Residence <b>Jacksonville, FL</b>	
Citizenship <b>United States of America</b>	
Post Office Address <b>5250 Siesta Rio Drive South, Jacksonville, FL 32258</b>	

Full name of second inventor  
**Michael J. BULTMAN**

Signature of second inventor

Date

Residence  
**Jacksonville, FL**

Citizenship  
**United States of America**

Post Office Address  
**2244 Aztec Drive West, Jacksonville, FL 32246**

Full name of third inventor  
**Robert W. COOK**

Signature of third inventor

Date

Residence  
**Switzerland, FL**

Citizenship  
**United States of America**

Post Office Address  
**1432 Roberts Road, Switzerland, FL 32259**

Full name of fourth inventor  
**Richard C. LOOKE**

Signature of fourth inventor

Date

Residence  
**Jacksonville, FL**

Citizenship  
**United States of America**

Post Office Address  
**3170 Ricky Drive, Jacksonville, FL 32223**

Full name of fifth inventor  
**Charley D. MOSES, JR.**

Signature of fifth inventor

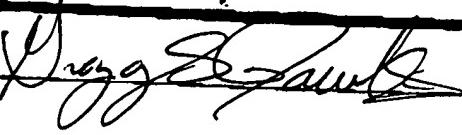
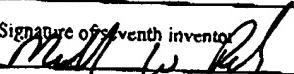
Date

Residence  
**Jacksonville, FL**

Citizenship  
**United States of America**

Post Office Address  
**4314 Naranja Drive, Jacksonville, FL 32217**

Appl. No. 09/525,615  
Docket No. 1744.0450003

Full name of sixth inventor <b>Gregory S. RAWLINS</b>		Date <b>6/13/00</b>
Signature of sixth inventor		
Residence <b>Lake Mary, FL</b>		
Citizenship <b>United States of America</b>		
Post Office Address <b>299 Leslie Lane, Lake Mary FL 32746</b>		
Full name of seventh inventor <b>Michael W. RAWLINS</b>		
Signature of seventh inventor 	Date <b>06/13/00</b>	
Residence <b>Lake Mary, FL</b>		
Citizenship <b>United States of America</b>		
Post Office Address <b>665 Brightview Drive, Lake Mary, FL 32746</b>		

PMSF0915V1A.DES/Jeffrey T. Helvey/1744.0450003.doc  
Rev 04-12-99

(Supply similar information and signature for subsequent joint inventors, if any)



## Certificate Under 37 C.F.R. § 3.73(b)

Applicant/Patent Owner: David F. SORRELLS et al.

Application No./Patent No.: 09/525,615 Filed/Issue Date: March 14, 2000

Entitled: Method, System, and Apparatus for Balanced Frequency up-Conversion of a Baseband Signal

ParkerVision, Inc., a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1.  the assignee of the entire right, title, and interest, or
2.  an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

A.  An Assignment from the inventor(s) of the patent application/patent identified above, for which a copy thereof is attached.

OR

B.  A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

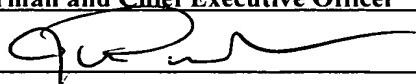
[NOTE: A separate copy (*i.e.*, the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: X 6-15-00

Name: Jeffrey L. Parker

Title: Chairman and Chief Executive Officer

Signature: X 

## ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventor(s): **1) David F. SORRELLS; 2) Michael J. BULLEMAN; 3) Robert W. COOK; 4) Richard C. LOOKE; 5) Charley D. MOSES, JR.; 6) Gregory S. RAWLINS, and 7) Richard W. RAWLINS**, the undersigned inventor(s) hereby sell(s) and assign(s) to **ParkerVision, Inc., 8493 Baymeadows Way, Jacksonville, FL 32256** (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

*"NOT FOR COPY RECORADATION"*

*check applicable box(es)*  for the United States of America (as defined in 35 U.S.C. § 100),  
 and throughout the world,

- (a) in the invention(s) known as **Method, System, and Apparatus for Balanced Frequency Up-Conversion of a Baseband Signal** for which application(s) for patent in the United States of America has (have) been executed by the undersigned on **1) 6-12-002 6-12-063 6-12-004 6-14-05 6-12-048 6-13-00 and 7) 6-12-00** (also known as United States Application No. **09/525,615**, filed **March 14, 2000**, in any and all applications thereon, in any and all Letters Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;
- "NOT FOR COPY RECORADATION"*

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

*"NOT FOR COPY RECORADATION"*

The undersigned inventor(s) hereby represent(s) that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventor(s) hereby grant(s) Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; Samuel

L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; Raz E. Fleshner, Esquire, Registration No. 34,331; John M. Covert, Esquire, Registration No. 38,759; and Linda E. Alcorn, Esquire, Registration No. 39,588; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Suite 600, Washington, D.C. 20005-3934, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

*"NOT FOR RECOGNITION"*

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

Date: X 06/12/00 Signature of Inventor: *David Sorrell*  
1) David F. SORRELLS

Date: X 12/12/00 Signature of Inventor: *M.J. Bultman*  
2) Michael J. BULTMAN

Date: X 6/12/00 Signature of Inventor: *Robert W. Cook*  
3) Robert W. COOK

Date: X June 14, 2000 Signature of Inventor: *R.C. Looke*  
4) Richard C. LOOKE

*"COPY  
NOT FOR RECOGNITION"*

Date: X June 12, 2000 Signature of Inventor: *Charley D. Moses Jr.*  
5) Charley D. MOSES, Jr.

Date: X Signature of Inventor: *Gregory S. Rawlins*  
6) Gregory S. RAWLINS

Date: X Signature of Inventor: *Michael W. Rawlins*  
7) Michael W. RAWLINS

*"COPY  
NOT FOR RECOGNITION"*

L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; Raz E. Fleshner, Esquire, Registration No. 34,331; John M. Covert, Esquire, Registration No. 38,759; and Linda E. Alcorn, Esquire, Registration No. 39,588; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Suite 600, Washington, D.C. 20005-3934, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

**IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name:**

Date: X Signature of Inventor: X  
1) David F. SORRELLS

Date: X Signature of Inventor: X  
2) Michael J. BULTMAN

Date: X Signature of Inventor: X  
3) Robert W. COOK

Date: X Signature of Inventor: X  
4) Richard C. LOOKE

Date: X Signature of Inventor: X  
5) Charley D. MOSES, Jr.

Date: X 6/13/00 Signature of Inventor: X  
6) Gregory S. RAWLINS

Date: X 6/13/00 Signature of Inventor: X  
7) Michael W. RAWLINS

## POWER OF ATTORNEY FROM ASSIGNEE



ParkerVision, Inc., a corporation of **Florida**, having a principal place of business at **8493 Baymeadows Way, Jacksonville, FL 32256**, is assignee of the entire right, title and interest for the United States of America (as defined in 35 U.S.C. § 100), by reason of an Assignment to the Assignee executed on **1) 6-12-00 ; 2) 6-12-00 ; 3) 6-12-00 ; 4) 6-14-00 ; 5) 6-12-00 ; 6) 6-13-00 ; and 7) 6-12-00** of an invention known as **Method, System, and Apparatus for Balanced Frequency Up-Conversion of a Baseband Signal** (Attorney Docket No. 1744.0450003), which is disclosed and claimed in a patent application of the same title by the inventor(s) **1) David F. SORRELLS; 2) Michael J. BULTMAN; 3) Robert W. Cook; 4) Richard C. Looke; 5) Charley D. Moses, Jr.; 6) Gregory S. RAWLINS; and 7) Michael W. RAWLINS**, (said application filed on **March 14, 2000** at the U.S. Patent and Trademark Office, having Application Number **09/525,615**).

The Assignee hereby appoints the following U.S. attorneys to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith: Robert Greene Sterne, Esq., Reg. No. 28,912; Edward J. Kessler, Esq., Reg. No. 25,688; Jorge A. Goldstein, Esq., Reg. No. 29,021; Samuel L. Fox, Esq., Reg. No. 30,353; David K.S. Cornwell, Esq., Reg. No. 31,944; Robert W. Esmond, Esq., Reg. No. 32,893; Tracy-Gene G. Durkin, Esq., Reg. No. 32,831; Michele A. Cimbala, Esq., Reg. No. 33,851; Michael B. Ray, Esq., Reg. No. 33,997; Robert E. Sokohl, Esq., Reg. No. 36,013; Eric K. Steffe, Esq., Reg. No. 36,688; Michael Q. Lee, Esq., Reg. No. 35,239; Steven R. Ludwig, Esq., Reg. No. 36,203; Raz E. Fleshner, Esq., Reg. No. 34,331; John M. Covert, Esq., Reg. No. 38,759; and Linda E. Alcorn, Esq., Reg. No. 39,588. The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 New York Avenue, N.W.  
Suite 600  
Washington, D.C. 20005-3934  
U.S.A.

Direct phone calls to 202-371-2600.

FOR: ParkerVision, Inc.

SIGNATURE: X

BY: Jeffrey L. Parker

TITLE: Chairman and Chief Executive Officer

DATE: X 6-15-00